



Emerging new infections: Importance in child health

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Abstract:

A complex interplay of environmental and human factors, including ecological, genetic, political and socioeconomic factors, is responsible for the emergence and re-emergence of infectious diseases. These factors often have a distinct effect on children and, as a result, emerging infections can have unique impacts on younger populations in terms of both physical health and mental as well as social wellbeing. Children are the most vulnerable members of our society. In order to best protect them from the impact of emerging infectious diseases, it is imperative to understand how factors that determine disease emergence and emerging diseases themselves can affect the young. This will allow us to focus on the most appropriate measures to not only prevent infection of pediatric populations but also prepare for the treatment and care of children when an infectious disease emerges. Influenza is a prototypical emerging/re-emerging infectious disease. Epidemic influenza re-emerges annually in periods between influenza pandemics. Both epidemic and pandemic influenza can have considerable impacts on the wellbeing of children. For over a decade, we have anticipated the mutation of avian influenza (H5N1) into a virus that can be efficiently transmitted between humans. This has resulted in substantial efforts to prepare for a virulent influenza pandemic. Although the pandemic potential of avian influenza has not (yet) been realized, efforts to prepare for a widespread pandemic have not been in vain. The unexpected emergence and rapid spread of the swine flu [influenza A(H1N1)v] has resulted in a worldwide pandemic that has already had profound effects on children and adults. Schools, day care centers, modern transport and international travel have all facilitated the spread of this new influenza strain. Swine flu exemplifies well how environmental and human factors interact to result in the emergence of an infectious disease with unique impacts on children.

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Resource Description

Exposure :

weather or climate related pathway by which climate change affects health

El Nino Southern Oscillation, Extreme Weather Event, Precipitation, Temperature

Extreme Weather Event: Flooding

Geographic Feature:

resource focuses on specific type of geography

None or Unspecified

Climate Change and Human Health Literature Portal

Geographic Location:

resource focuses on specific location

Global or Unspecified

Health Impact:

specification of health effect or disease related to climate change exposure

Infectious Disease

Infectious Disease: Airborne Disease

Airborne Disease: Influenza

Population of Concern: A focus of content

Population of Concern:

populations at particular risk or vulnerability to climate change impacts

Children

Resource Type:

format or standard characteristic of resource

Review

Timescale:

time period studied

Time Scale Unspecified